

WHAT IS CLAIMED IS:

sub. a1  
1. A method for providing an adjustable alarm system, the method comprising:  
receiving user related and configuration information, the user related information  
including at least one of a user-requested alarm time and user login information, the user login  
information allowing the retrieval of the user-requested time;  
connecting to a content provider to gather present unexpected condition information  
relevant to the user;  
determining an adjusted alarm time, wherein the adjusted alarm time factors in the user  
related and configuration information and the unexpected condition information; and  
providing an alarm signal when the actual time reaches the adjusted alarm time.

2. The method of claim 1, wherein a connection is made to the content provider on a  
periodic basis to gather the most recent unexpected condition information, and the adjusted alarm  
time is determined on a periodic basis based on the user related and configuration information  
and the most recent unexpected condition information.

3. The method of claim 1, wherein the user login information allows the retrieval of  
user-requested time and at least one of other user related information or other user configuration  
information based on historical information obtained in a previous use by a user.

4. The method of claim 1, wherein the user related information includes at least one  
of a user's location, a user's destination, user's preferred routes and user related flight or mass-  
transit information.

1           5.       The method of claim 4, wherein the user's location and the user's destination are  
2 utilized to determine the routes that a user uses to travel from the location to the destination.

1           6.       The method for claim 1, wherein the user configuration information includes at  
2 least one of parameters and preferences that specify the amount of alarm adjustment for certain  
3 unexpected conditions.

1           7.       The method for claim 1, wherein the user configuration information includes at  
2 least one of parameters and preferences that relate different intensity levels of an unexpected  
3 condition to the amount of alarm adjustment.

1           8.       The method of claim 1, wherein the user configuration information includes at  
2 least one of parameters and preferences that control the amount of effect for certain unexpected  
3 conditions.

1           9.       The method of claim 1, wherein a special alarm is activated by the enhanced  
2 alarm clock when the adjusted alarm time differs from the user-requested alarm time.

1           10.      The method of claim 1, wherein the unexpected condition information relates to  
2 traffic information, including at least one of accidents, delays, average speed, congestion,  
3 construction and travel restrictions.

1 11. The method of claim 1, wherein the unexpected condition information relates to  
2 weather information, including at least one of snow, rain, fog, sleet hail and high winds.

1 12. The method of claim 1, wherein the unexpected condition information relates to  
2 delay or advancement of at least one of mass-transit arrival time and mass-transit departure time.

1 13. The method of claim 1, wherein the alarm signal includes at least one of an  
2 audible, visual, sensory and vibration signal.

1 14. A computer readable medium for use in conjunction with an alarm system for  
2 providing an adjustable alarm signal, the computer readable medium including computer  
3 readable instructions encoded thereon for:

4 receiving user related and configuration information, the user related information  
5 including at least one of a user-requested alarm time and user login information, the user login  
6 information allowing the retrieval of the user-requested time;

7 connecting to a content provider to gather present unexpected condition information  
8 relevant to the user;

9 determining an adjusted alarm time, wherein the adjusted alarm time factors in the user  
10 related and configuration information and the unexpected condition information; and

11 providing an alarm signal when the actual time reaches the adjusted alarm time.

1 15. The computer readable medium of claim 14, wherein a connection is made to the  
2 content provider on a periodic basis to gather the most recent unexpected condition information,

3 and the adjusted alarm time is determined on a periodic basis based on the user related and  
4 configuration information and the most recent unexpected condition information.

1 3 16. The computer readable medium of claim 14, wherein the user login information  
2 allows the retrieval of user-requested time and at least one of other user related information or  
3 other user configuration information based on historical information obtained in a previous use  
4 by a user.

1 4 17. The computer readable medium of claim 14, wherein the user related information  
2 includes at least one of a user's location, a user's destination, user's preferred routes and user  
3 related mass-transit information.

1 18. The computer readable medium of claim 17, wherein the user's location and the  
2 user's destination are utilized to determine the routes that a user uses to travel from the location  
3 to the destination.

1 6 19. The computer readable medium of claim 15, wherein the user configuration  
2 information includes at least one of parameters and preferences that specify the amount of alarm  
3 adjustment for certain unexpected conditions.

1 7 20. The computer readable medium of claim 15, wherein the user configuration  
2 information includes at least one of parameters and preferences that relate different intensity  
3 levels of an unexpected condition to the amount of alarm adjustment.

1           21.    The computer readable medium of claim 15, wherein the user configuration  
2 information includes at least one of parameters and preferences that control the amount of effect  
3 for certain unexpected conditions.

1           22.    The computer readable medium of claim 15, wherein a special alarm is activated  
2 by the enhanced alarm clock when the adjusted alarm time differs from the user-requested alarm  
3 time.

1           23.    The computer readable medium of claim 15, wherein the unexpected condition  
2 information relates to traffic information, including at least one of accidents, delays, average  
3 speed, congestion, construction and travel restrictions.

1           24.    The computer readable medium of claim 15, wherein the unexpected condition  
2 information relates to weather information, including at least one of snow, rain, fog, sleet hail  
3 and high winds.

1           25.    The computer readable medium of claim 15, wherein the unexpected condition  
2 information relates to delay or advancement of at least one of mass-transit arrival time and mass-  
3 transit departure time.

1           26.    The computer readable medium of claim 15, wherein the alarm signal includes at  
2 least one of an audible, visual, sensory and vibration signal.

1        27.    An enhanced alarm signal generating system, comprising:  
2            an alarm signal generator that receives user related and configuration information and  
3        create an alarm signal, the user related information including at least one of user-requested alarm  
4        time and user login information, the user login information allowing the retrieval of the user-  
5        requested time;  
6            a content provider that gather present unexpected condition information relevant to the  
7        user; and  
8            a communications link the connects the alarm signal generator with the content provider,  
9        wherein user related information is sent to the content provider via the communications link to  
10       gather the unexpected condition information, an adjusted alarm time being determined on the  
11       basis of the user related and configuration information and the unexpected condition information,  
12       and an alarm signal being created when the actual time reaches the adjusted alarm time.

1        28.    The enhanced alarm signal generating system of claim 27, wherein the  
2        unexpected condition information is gathered on a periodic basis to receive the most recent  
3        unexpected condition information, and the adjusted alarm time is determined on a periodic basis  
4        based on the user related and configuration information and the most recent unexpected  
5        condition information.

1        29.    The enhanced alarm signal generating system of claim 27, wherein the user login  
2        information allows the retrieval of user-requested time and at least one of other user related  
3        information or other user configuration information based on historical information obtained in a  
4        previous use by a user.

1           30.    The enhanced alarm signal generating system of claim 27, wherein the  
2 unexpected condition information is received by and the adjusted alarm time is determined by  
3 the alarm signal generator.

1           31.    The enhanced alarm signal generating system of claim 27, wherein the  
2 unexpected condition information is kept at and the adjusted alarm time is determined by  
3 equipment remote from the alarm signal generator.

1           32.    The enhanced alarm signal generating system of claim 27, wherein the user  
2 configuration information includes at least one of parameters and preferences that specify the  
3 amount of alarm adjustment for certain unexpected conditions.

1           33.    The enhanced alarm signal generating system of claim 27, wherein the user  
2 configuration information includes at least one of parameters and preferences that relate different  
3 intensity levels of an unexpected condition to the amount of alarm adjustment.

1           34.    The enhanced alarm signal generating system of claim 27, wherein the user  
2 configuration information includes at least one of parameters and preferences that control the  
3 amount of effect for certain unexpected conditions.

1           35.    The enhanced alarm signal generating system of claim 27, wherein the alarm  
2 signal is a special alarm when the adjusted alarm time differs from the user-requested alarm time.

1        36.    The enhanced alarm signal generating system of claim 27, wherein the alarm  
2 signal includes at least one of an audible, visual, sensory and vibration signal.

1        37.    The enhanced alarm signal generating system of claim 27, wherein the alarm  
2 signal generator is any one of a normal alarm clock integrated with a receiver and a processor, an  
3 enhanced alarm clock device, and a device that incorporates an enhanced alarm clock.

1        38.    A call back style alarm system, comprising:

2            a call back service that receives user related and configuration information, and  
3 determines an adjusted alarm time, the user related information including at least one of user-  
4 requested alarm time and user login information, the user login information allowing the retrieval  
5 of the user-requested time;

6            a content updater coupled to the call back service, the content updater gathering present  
7 unexpected condition information relevant to the user;

8            a telecommunication device that receives a call from the call back service; and

9            a communications link that connects the call back service with the telecommunication  
10 device during a call, wherein user related and configuration information of a user is received at  
11 the call back service, which uses the user related information to obtain unexpected condition  
12 information pertinent to the user from the content updater, the adjusted alarm time being  
13 determined on the basis of the user related and configuration information and the unexpected  
14 condition information, a call being made to the telecommunication device when the actual time  
15 reaches the adjusted alarm time.



1           39.     The call back style alarm system of claim 38, wherein the user related and  
2 configuration information is entered through the telecommunication device during a call.

1           40.     The call back style alarm system of claim 38, further comprising a terminal that  
2 provides user related and configuration information to the call back service, wherein the terminal  
3 is provide with inputting interface for a user to enter user related and configuration information.

1           41.     The call back style alarm system of claim 38, wherein the unexpected condition  
2 information is gathered on a periodic basis to receive the most recent unexpected condition  
3 information, and the adjusted alarm time is determined on a periodic basis based on the user  
4 related and configuration information and the most recent unexpected condition information.

1           42.     The call back style alarm system of claim 38, wherein the user login information  
2 allows the retrieval of user-requested time and at least one of other user related information or  
3 other user configuration information based on historical information obtained in a previous use  
4 by a user.

1           43.     The call back style alarm system of claim 38, wherein the user configuration  
2 information includes at least one of parameters and preferences that specify the amount of alarm  
3 adjustment for certain unexpected conditions.

1           44.    The call back style alarm system of claim 38, wherein the user configuration  
2 information includes at least one of parameters and preferences that relate different intensity  
3 levels of an unexpected condition to the amount of alarm adjustment.

1           45.    The call back style alarm system of claim 38, wherein the user configuration  
2 information includes at least one of parameters and preferences that control the amount of effect  
3 for certain unexpected conditions.

1           46.    The call back style alarm system of claim 38, wherein the call is made in a  
2 different mode when the adjusted alarm time differs from the user-requested alarm time.

1           47.    The call back style alarm system of claim 38, wherein the telecommunication  
2 device is any one of a telephone, a wireless phone, a pager, a text messenger, a computing device  
3 and a personal digital assistant.

1           48.    An intelligent alarm signal generator, comprising:  
2           a user interface device for inputting user related and configuration information, the user  
3 related information including at least one of user-requested alarm time and user login  
4 information, the user login information allowing the retrieval of the user-requested time;  
5           communication equipment that allows communication to be established between the  
6 intelligent alarm signal generator and a content provider;  
7           a first logic that retrieves or accepts unexpected condition information relevant to the user  
8 from the content provider;

9 a second logic that determines an adjusted alarm time based on the user related and  
10 configuration information and the retrieved unexpected condition information;  
11 a clock that has the actual time;  
12 an alarm that creates an alarm signal when the actual time reaches the adjusted alarm  
13 time.

1 49. The intelligent alarm signal generator of claim 48, wherein the unexpected  
2 condition information is retrieved or accepted on a periodic basis in order to get the most recent  
3 unexpected condition information, and the adjusted alarm time is determined on a periodic basis  
4 based on the user related and configuration information and the most recent unexpected  
5 condition information.

1 50. The intelligent alarm signal generator of claim 48, wherein the user login  
2 information allows the retrieval of user-requested time and at least one of other user related  
3 information or other user configuration information based on historical information obtained in a  
4 previous use by a user.

1 51. The intelligent alarm signal generator of claim 48, further comprising optional  
2 components, including at least one of antenna, radio tuner, CD player, speakers, audio  
3 input/output ports, video source.

1 52. A call back service, comprising:  
2 first communication equipment that receives user related and configuration information,  
3 the user related information including at least one of user-requested alarm time and user login  
4 information, the user login information allowing the retrieval of the user-requested time;  
5 second communication equipment that allows unexpected condition information relevant  
6 to the user to be retrieved;  
7 a first logic that retrieves or accepts the unexpected condition information from a content  
8 updater;  
9 a second logic that determines an adjusted alarm time based on the user related and  
10 configuration information and the retrieved unexpected condition information;  
11 a clock that has the actual time;  
12 a calling device that makes a call to telecommunication equipment when the actual time  
13 reaches the adjusted alarm time.

1 53. The call back service of claim 52, wherein the unexpected condition information  
2 is retrieved or accepted on a periodic basis in order to get the most recent unexpected condition  
3 information, and the adjusted alarm time is determined on a periodic basis based on the user  
4 related and configuration information and the most recent unexpected condition information.

1 54. The call back service of claim 52, wherein the user login information allows the  
2 retrieval of user-requested time and at least one of other user related information or other user  
3 configuration information based on historical information obtained in a previous use by a user.